

# **APPENDIX A**

**Decisionmark Study  
of  
Households Served/Unserved**

January 2002

# **Households Served/Unserved Tower Analysis**

Presented to the National Translator Association

January 2002

by

**decisionmark™**

## Household Served/Unserved Tower Analysis Introduction

This study illustrates the total number of households served and unserved by stations' predicted Grade B signals for the following networks: ABC; CBS; NBC; Fox; WB; PBS; and UPN. This report is all inclusive of the entire United States.

Seven maps, one for each network, represent the total number of households served and seven additional maps demonstrate the total number of households served exclusively via translator support.

Grade B household demographic coverage due to translator coverage only is provided. The study also provides the projected number of households that can and cannot receive all seven network signals.

## Decisionmark Methodology

**ILLR Algorithm** — Signal strength is determined by using the Individual Location Longley Rice Algorithm as defined in the FCC Report and Order, FCC99-14 of February 1, 1999. All processing is performed using Longley-Rice statistical inputs of 50% time variability, 50% location variability and 50% confidence factor for desired signal.

**Coronado Data Warehouse** — One of the most important components of Decisionmarks technology is our proprietary data warehouse, Coronado. Coronado has become the de facto broadcast industry standard for signal area data. Coronado's TV engineering database includes affiliate information that started with the Federal Communications Commission public domain information, but has been audited and enhanced extensively. It is the most accurate signal area database available and Decisionmark is committed to keeping it up-to-date.

Using the most recent version of Coronado at the time of the requested study (corver20020115), Decisionmark determined the count of served/unserved households by summing 2000 census block group data for each network.

**Household Coverage** — In the case of the National Coverage, the reports reflect unique households per network. For example, when a household is covered by multiple stations in the same network, the household is only counted once for that network.

In the case of the Translator Coverage, the same concept is used as the National Coverage. All translators being the universe, a household covered by multiple translators in the same network is counted as one household in the translator report.

Considering the above methodology, adding national served households with national served translator households will not reflect the exact households served for a particular network due to potential overlap between main stations and their translators.

**Demographics** — Decisionmark determines the demographics associated with each station's tower by running the Census Bureau's block group centroids (latitudes and longitudes representing the center of the block group) through the ILLR Server in a point-to-point mode using data from Decisionmark's proprietary Coronado data warehouse. This mode determines the field strength of each latitude and longitude in the form of a dBu. These latitudes and longitudes are then correlated back to the demographics of the Census block group that they represent to get the 2000 total household counts.

## Terminology

Network – Television Network

2000 Served Households – Unique household count for block groups in a Network's Coverage Area.

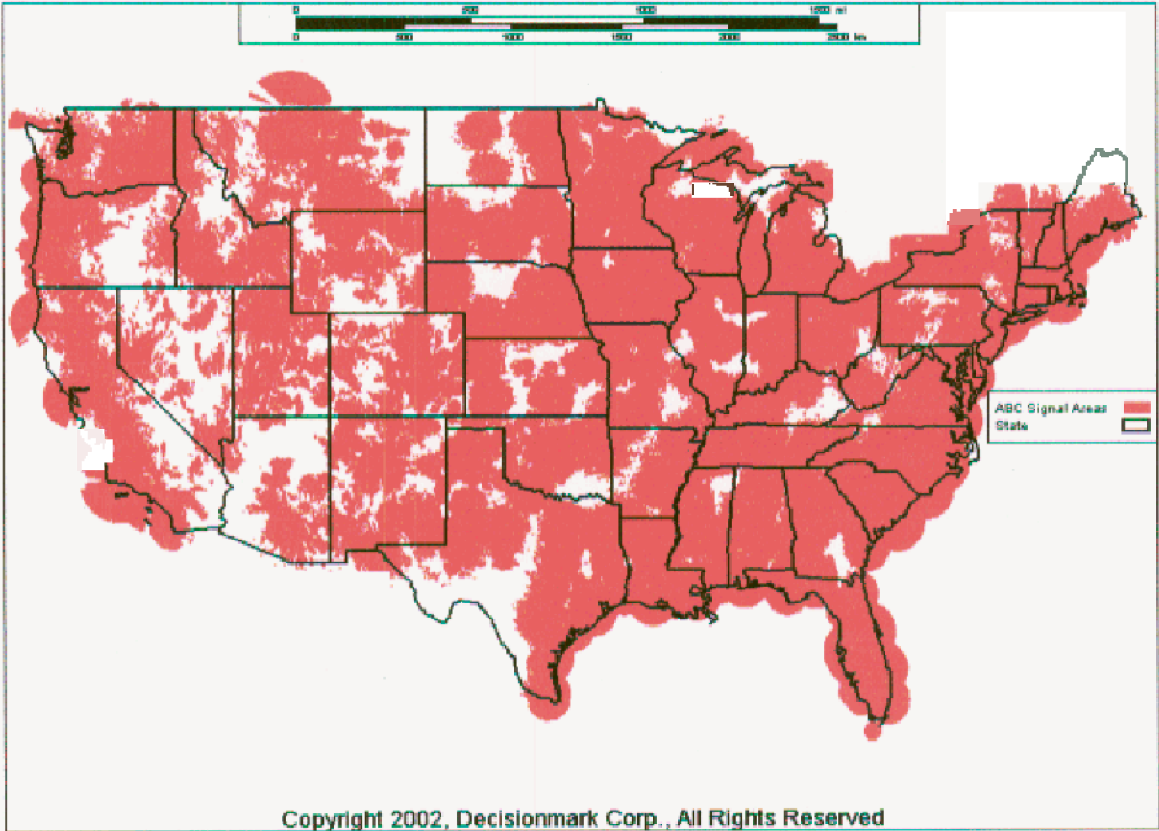
2000 Unserved Households – Unique household count for block groups outside a Network's Coverage Area.

Total – Sum of 2000 Served and Unserved households. Represents total household count for United States.

2000 HHs Can Receive All 7 – Unique count of households that can receive all 7 Network signals.

2000 HHs Cannot Receive All 7 – Unique count of households that cannot receive all 7 Network signals.

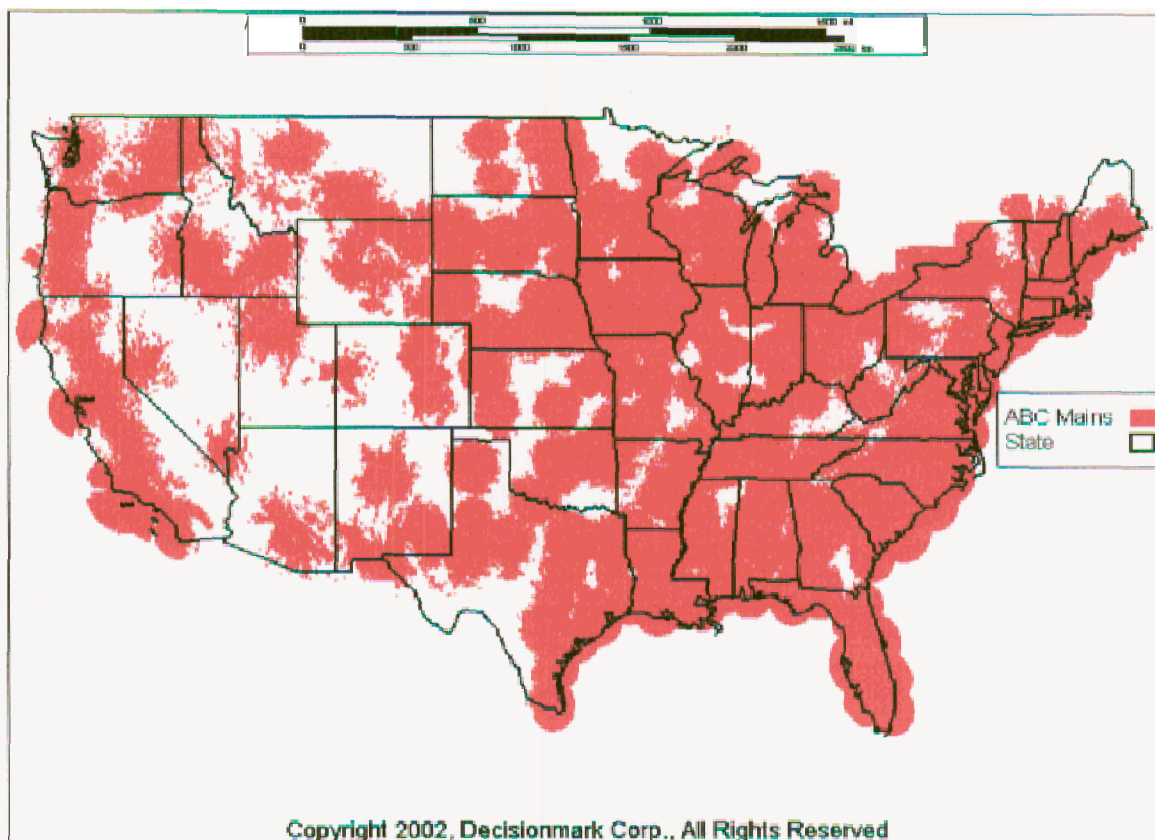
National Coverage for ABC  
Mains and Translators



Served/Unserved HHs for ABC

Network	2000 Served Households	2000 Unserved Households	Total
ABC	97,266,475	8,213,626	105,480,101

## National Coverage for ABC Mains Only



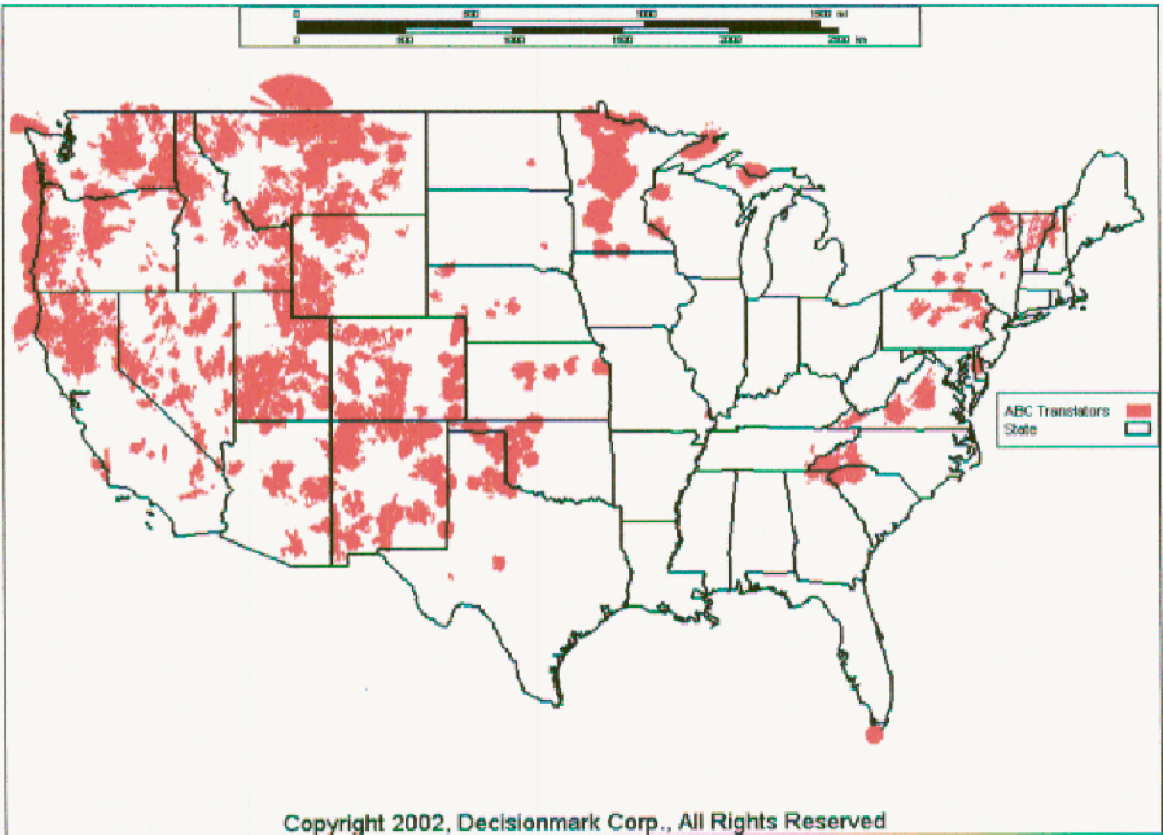
### Served/Unserved HHs for ABC (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
ABC	95,765,528	9,714,573	105,480,101

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National Coverage for ABC  
Translators Only



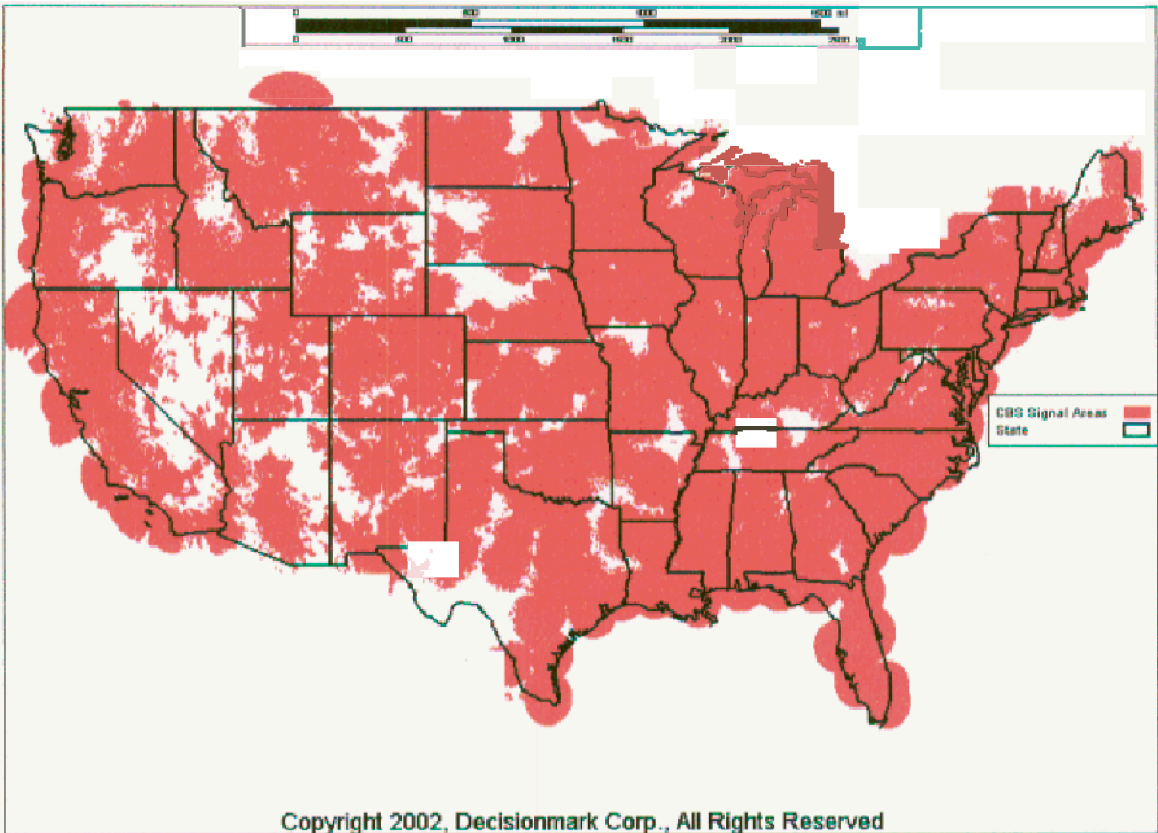
Served/Unserved HHs for ABC (Translators Only)

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Network	2000 Served Households	2000 Unserved Households	Total
ABC	3,825,141	101,654,960	105,480,101

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National Coverage for CBS  
Mains and Translators

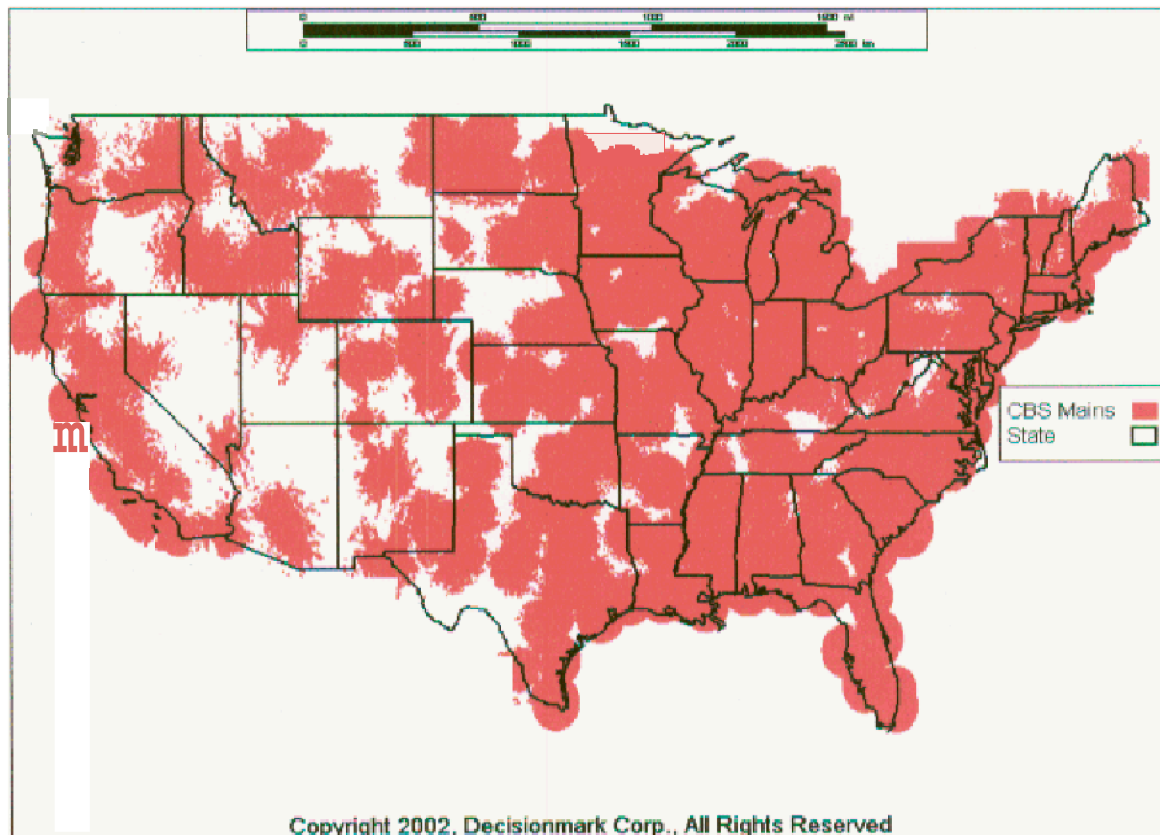


Served/Unserved HHs for CBS

Network	2000 Served Households	2000 Unserved Households	Total
CBS	97,389,064	8,091,037	105,480,101



## National Coverage for CBS Mains Only



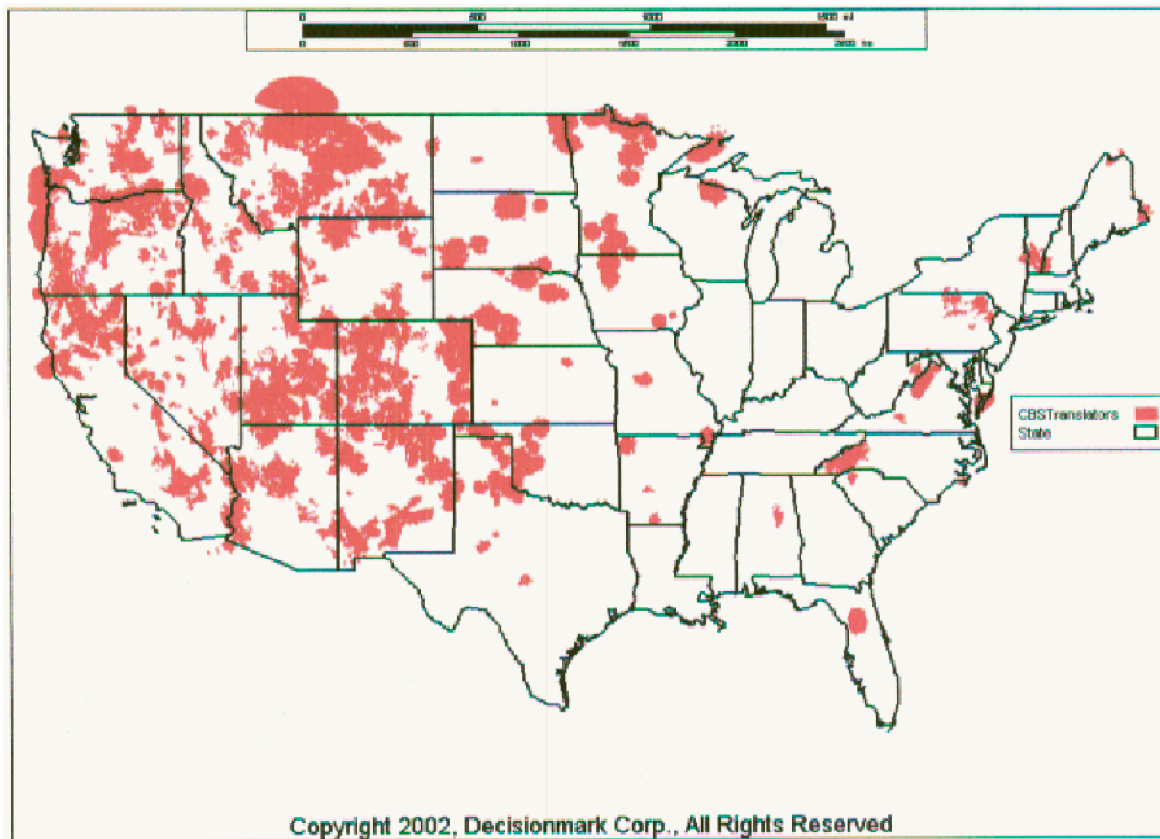
### Served/Unserved HHs for CBS (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
CBS	95,871,296	9,608,805	105,480,101

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## National Coverage for CBS Translators Only



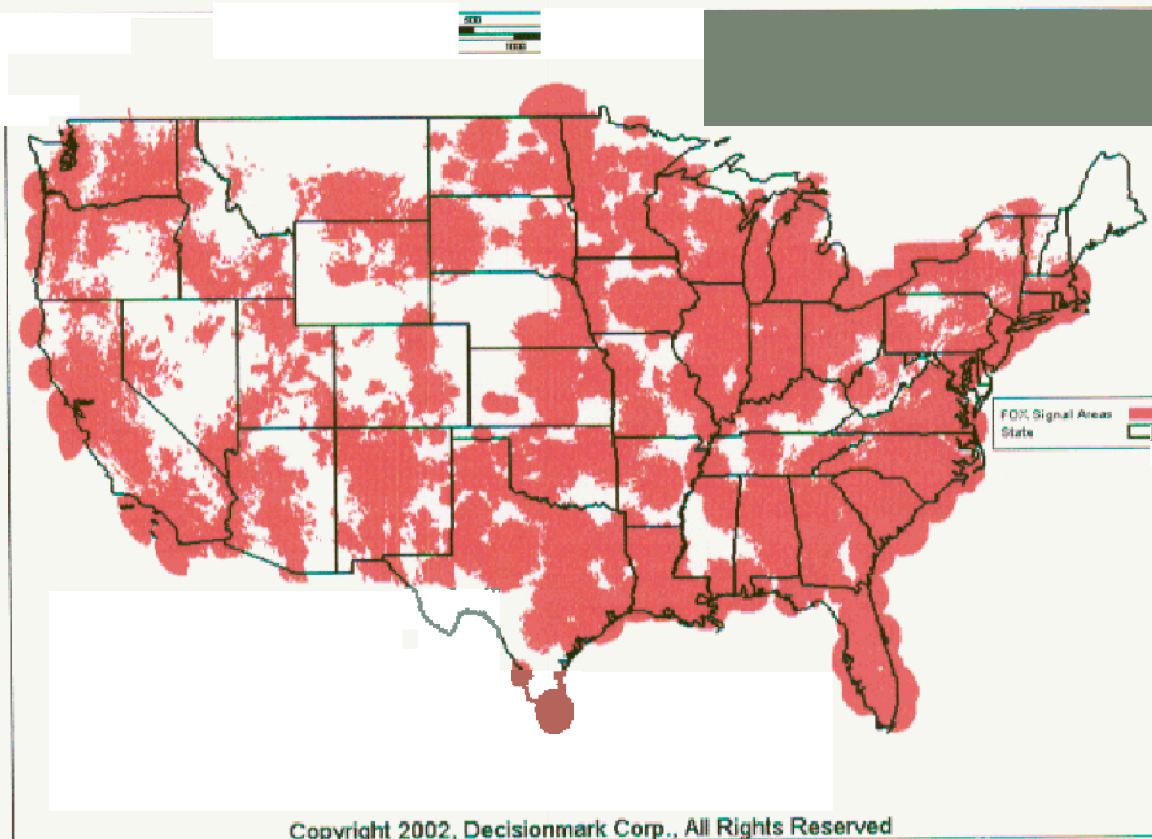
### Served/Unserved HHs for CBS (Translators Only)

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Network	2000 Served HHs	2000 Unserved HHs	Total
CBS	3,635,437	101,844,664	105,480,101

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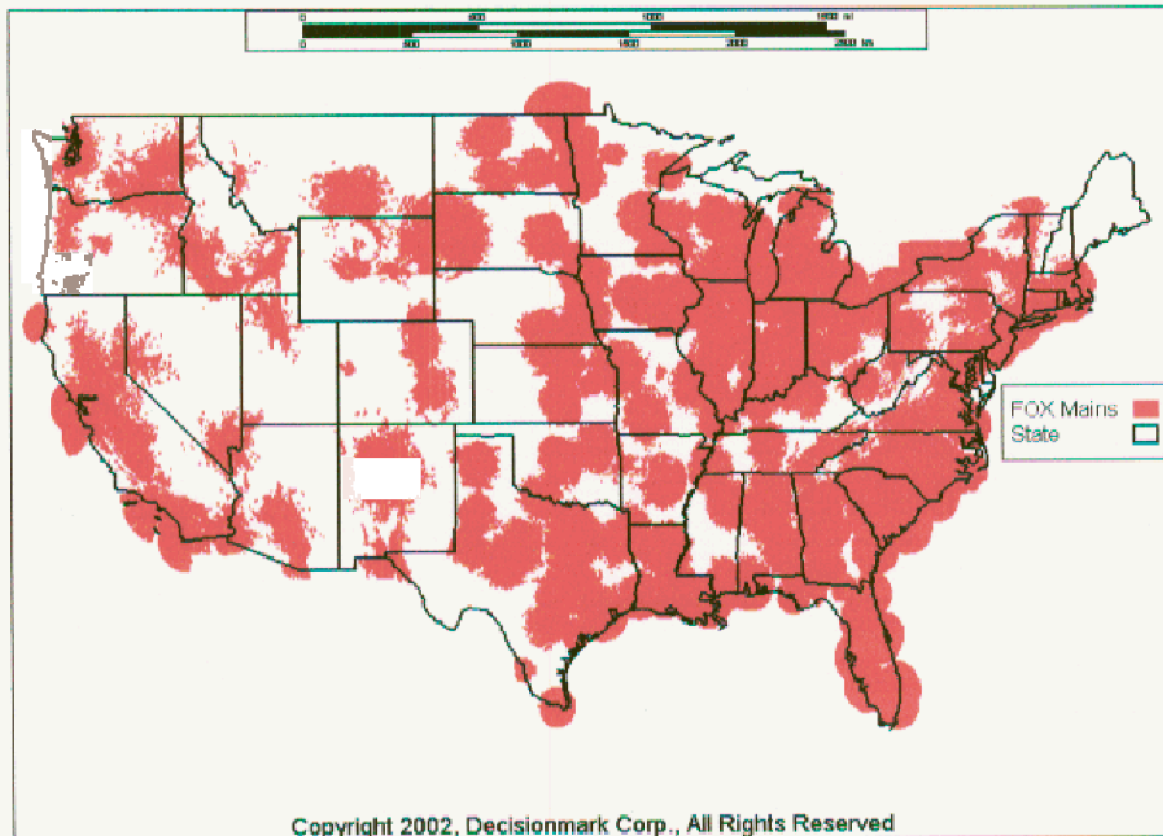
## National Coverage for FOX Mains and Translators



## Served/Unserved HHs for FOX

Network	2000 Served Households	2000 Unserved Households	Total
FOX	92,287,920	13,192,181	105,480,101

## National Coverage for FOX Mains Only



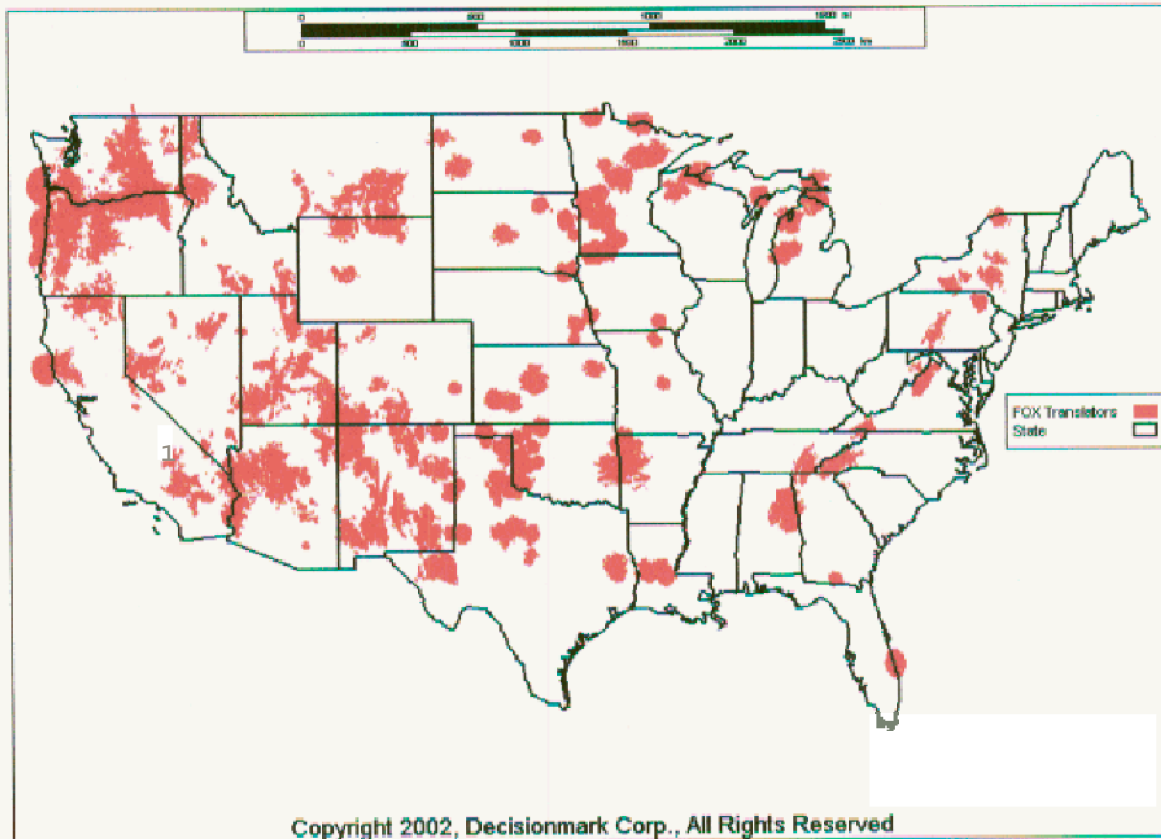
### Served/Unserved HHs for FOX (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
FOX	90,136,560	15,343,541	105,480,101

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## National Coverage for FOX Translators Only



### Served/Unserved HHs for FOX (Translators Only)

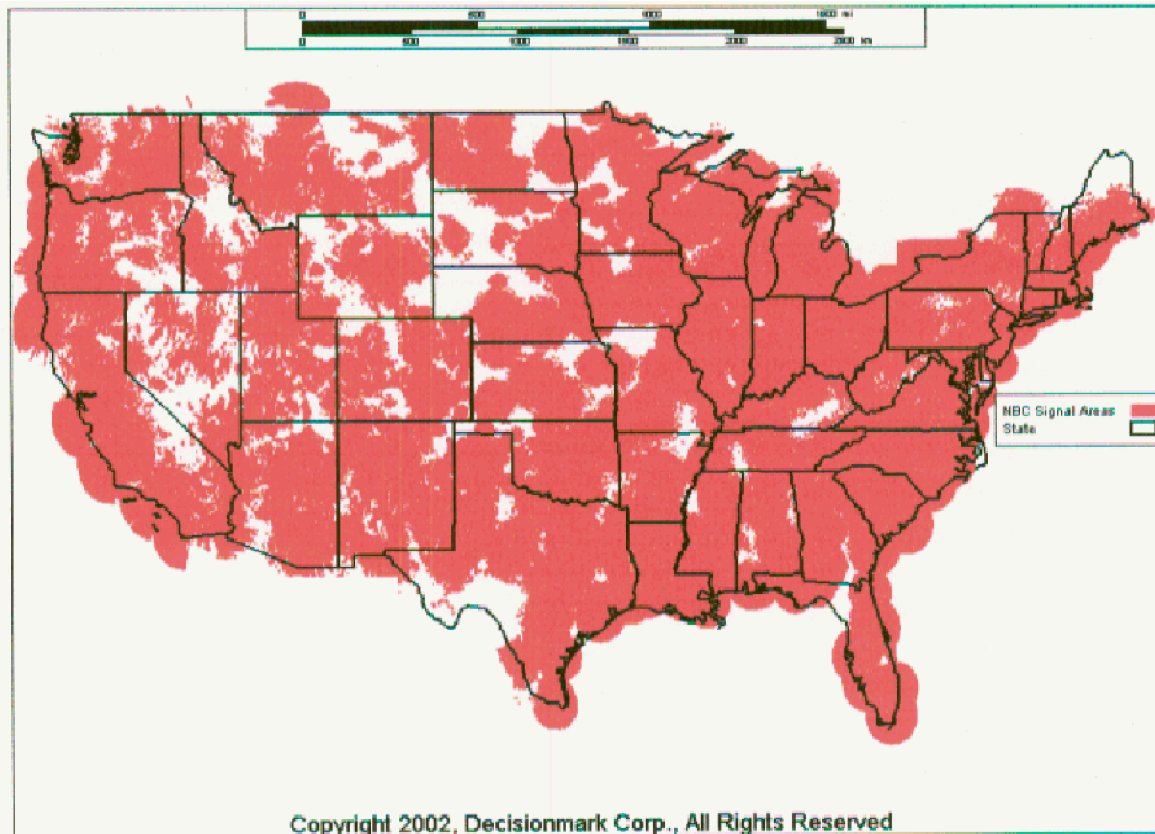
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Network	2000 Served Households	2000 Unserved Households	Total
FOX	5,096,186	100,383,915	105,480,101

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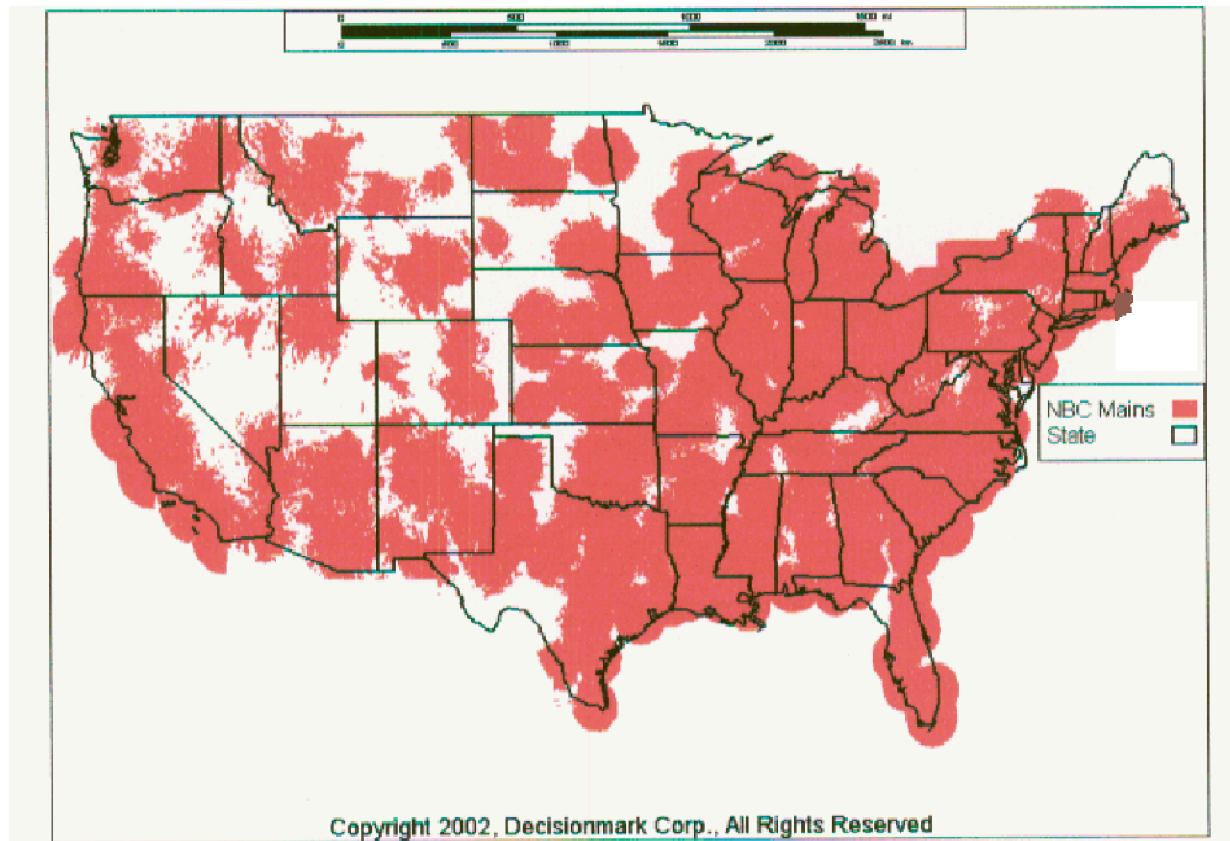
## National Coverage for NBC Mains and Translators



## Served/Unserved HHs for NBC

Network	2000 Served Households	2000 Unserved Households	Total
NBC	98,882,479	6,597,622	105,480,101

## National Coverage for NBC Mains Only



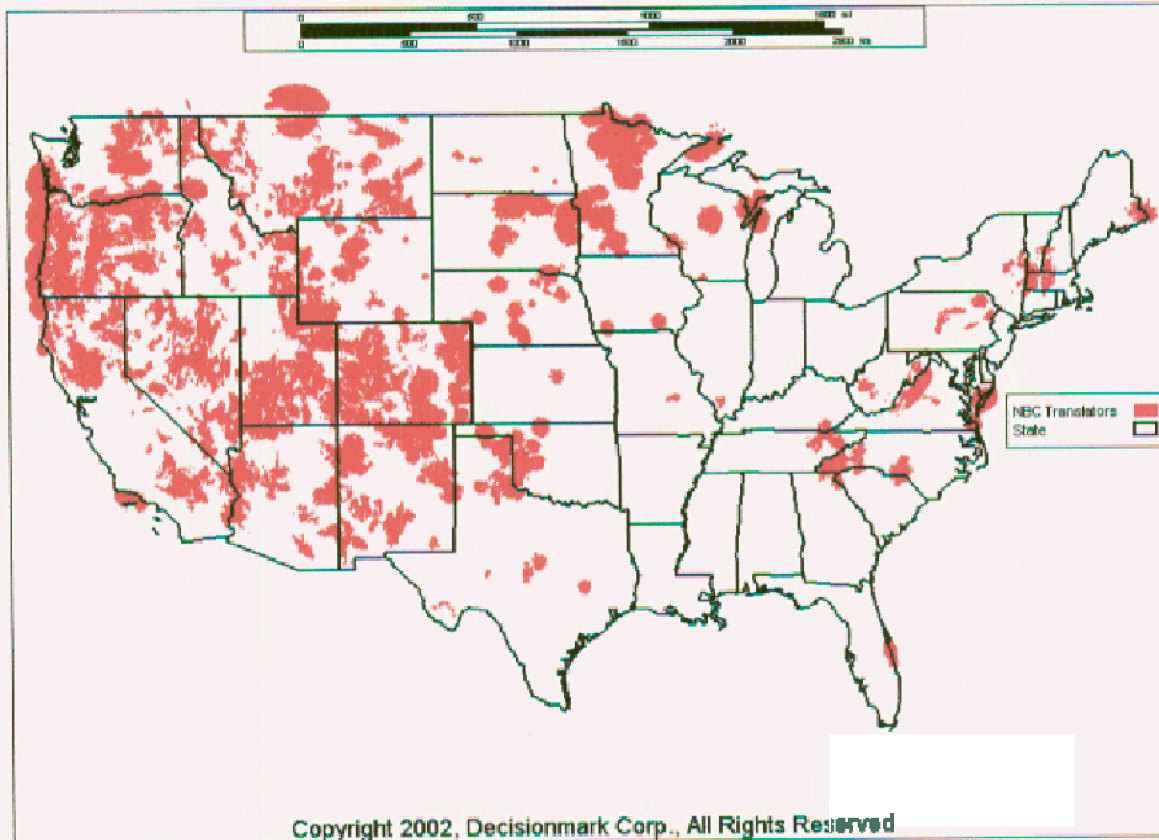
## Served/Unserved HHs for NBC (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
NBC	97,537,551	8,142,550	105,480,101

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## National Coverage for NBC Translators Only



### Served/Unserved HHs for NBC (Translators Only)

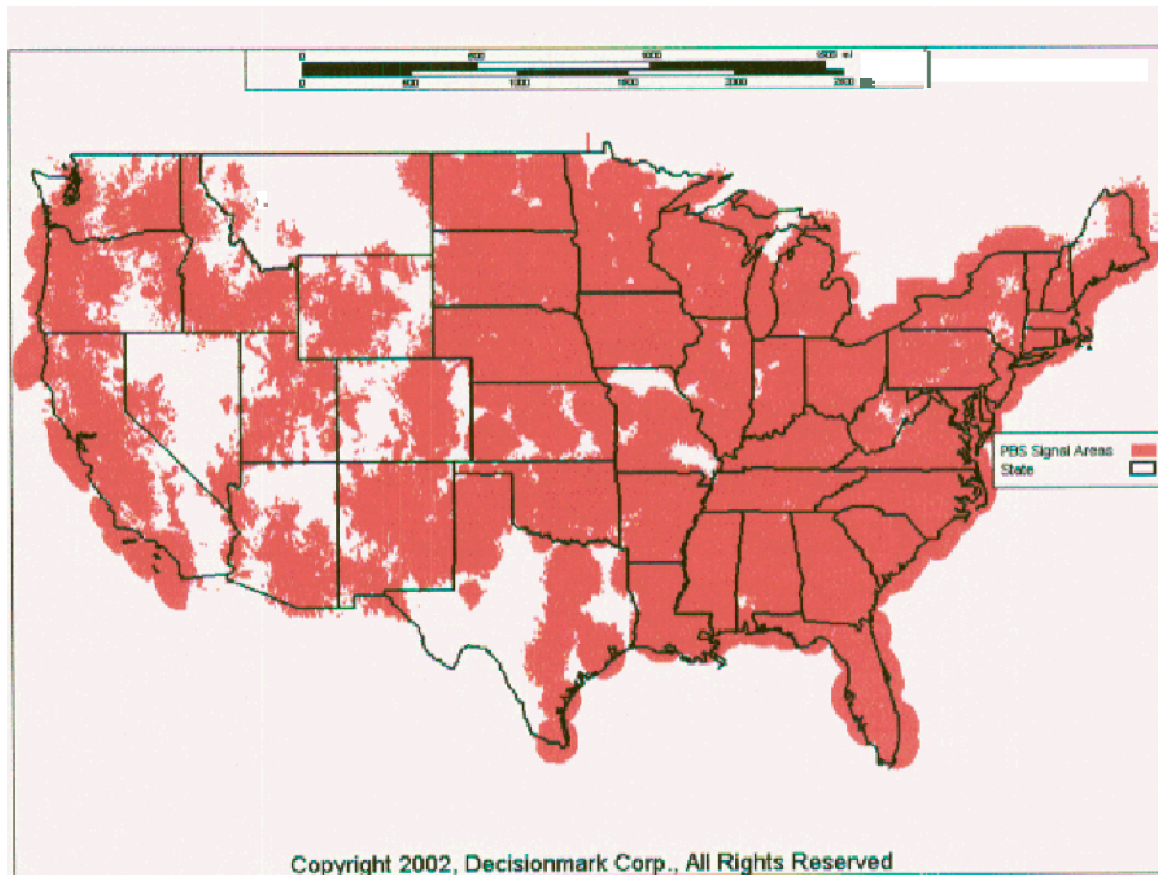
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Network	2000 Served HHs	2000 Unserved HHs	Total
NBC	4,217,861	101,262,240	105,480,101

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## National Coverage for PBS Mains and Translators



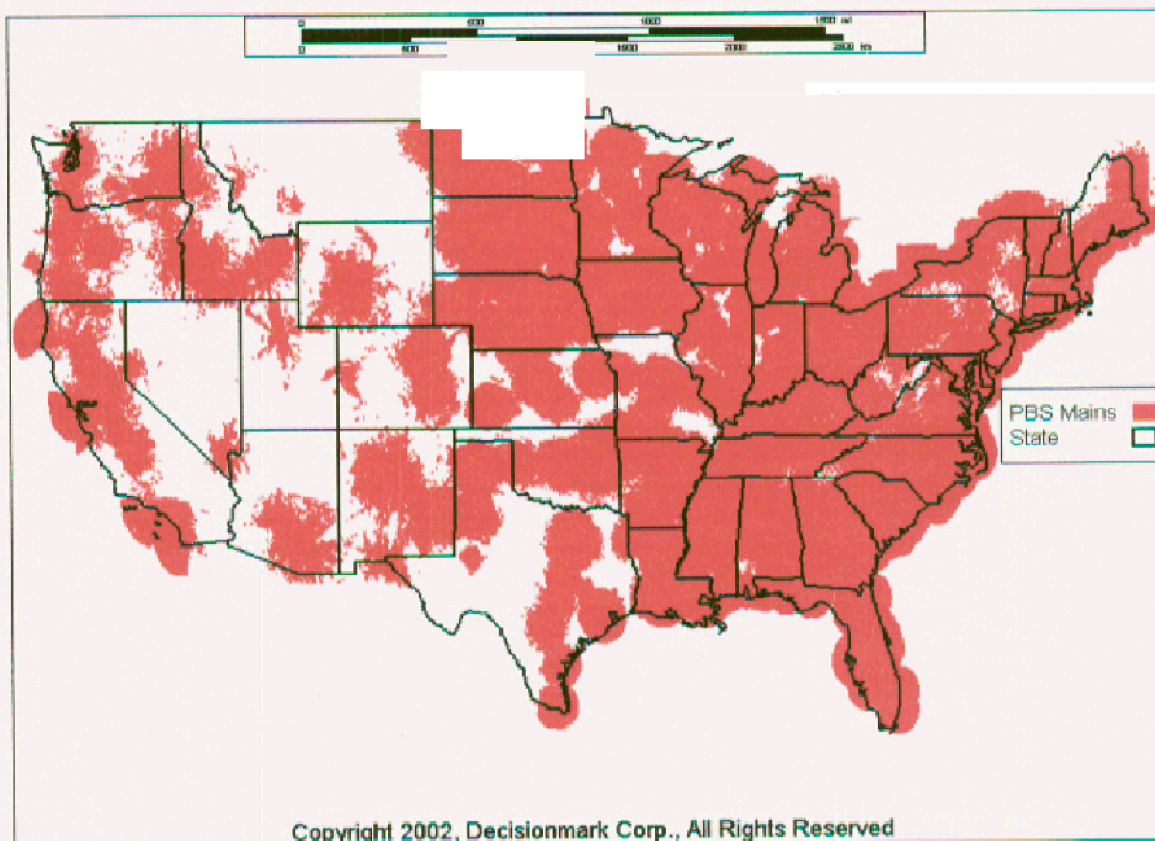
### Served/Unserved HHs for PBS

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Network	2000 Served Households	2000 Unserved Households	Total
PBS	97,083,278	8,396,823	105,480,101

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## National Coverage for PBS Mains Only



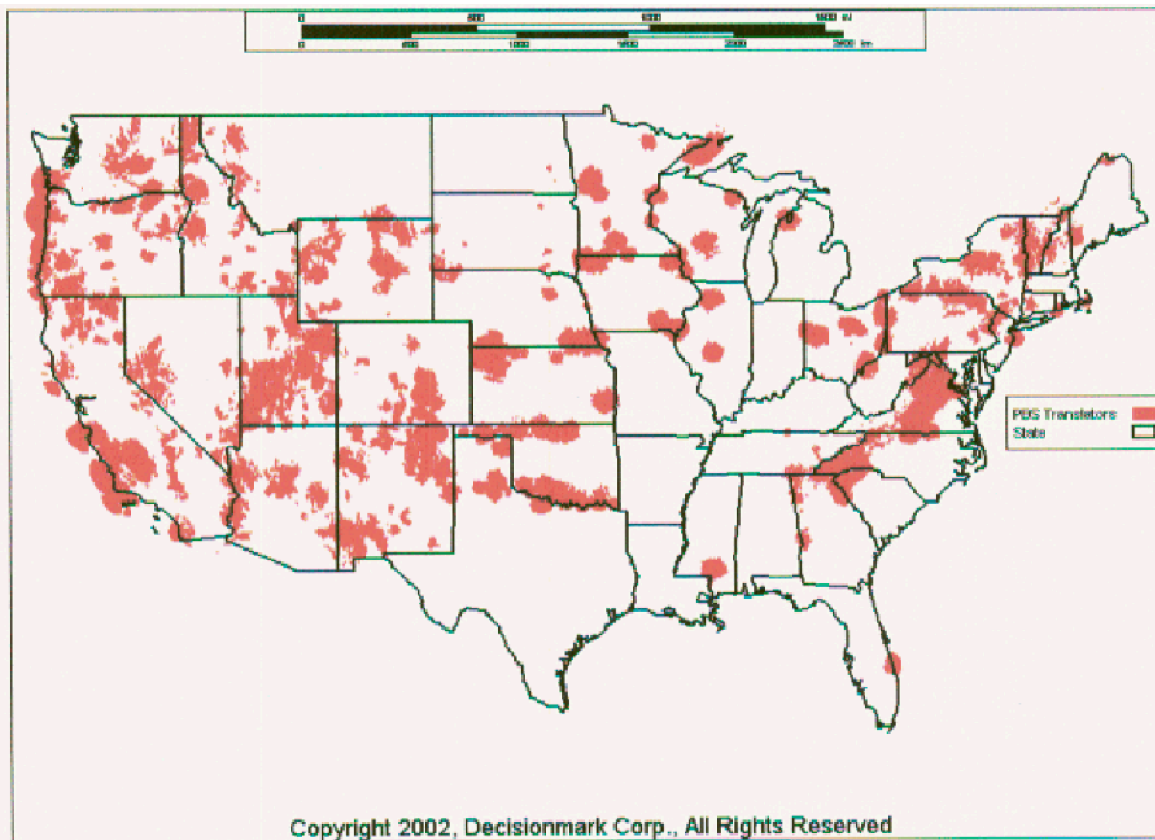
### Served/Unserved HHs for PBS (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
PBS	94,769,839	10,710,262	105,480,101

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## National Coverage for PBS Translators Only



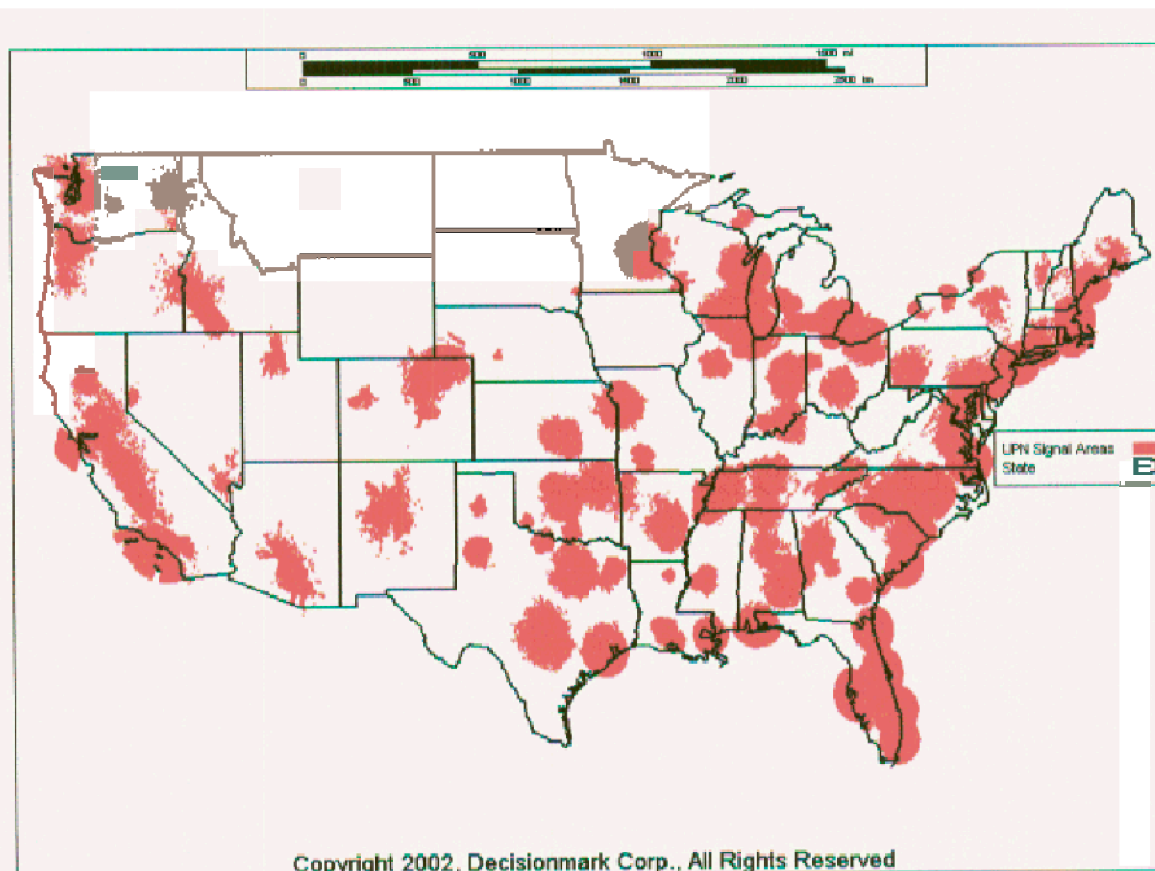
### Served/Unserved HHs for PBS (Translators Only)

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Network	2000 Served Households	2000 Unserved Households	Total
PBS	6,718,381	98,761,720	105,480,101

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## National Coverage for UPN Mains and Translators



### Served/Unserved HHs for UPN

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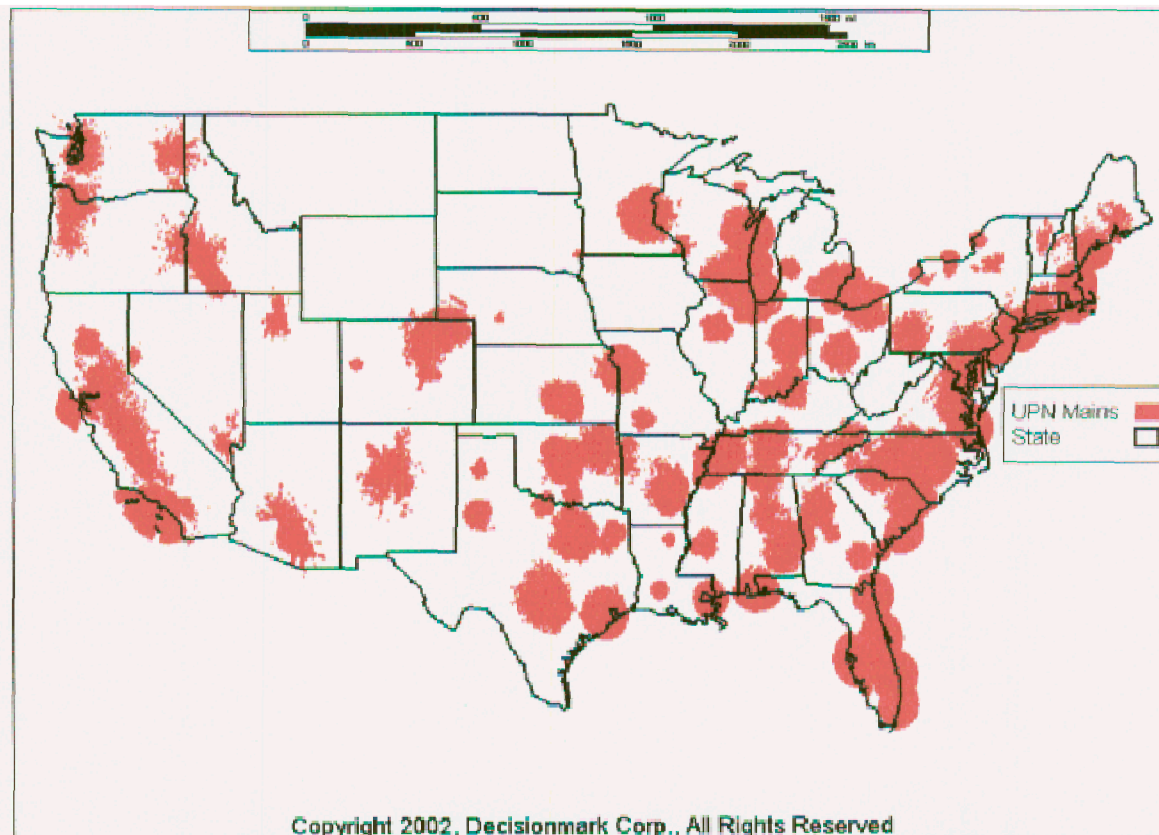
Network	2000 Served Households	2000 Unserved Households	Total
UPN	71,280,660	34,199,441	105,480,101

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## National Coverage for UPN Mains Only



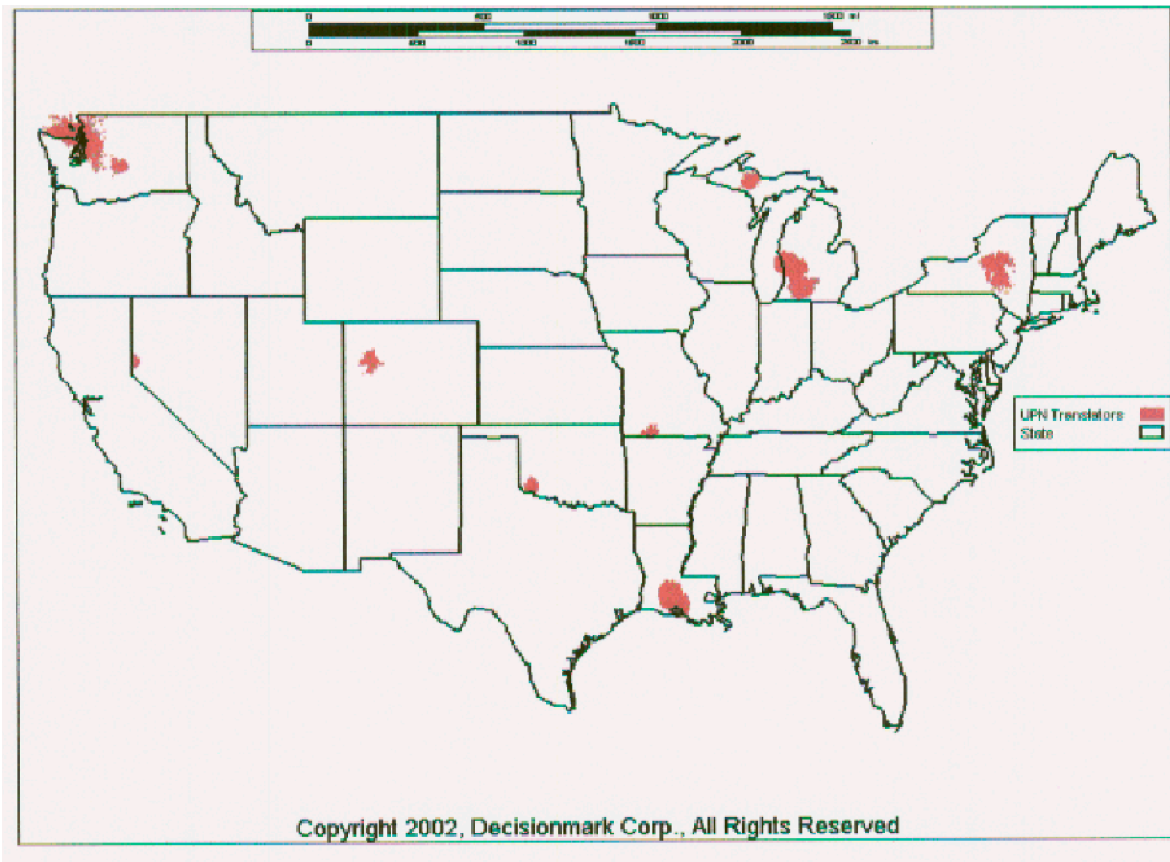
### Served/Unserved HHs for UPN (Mains Only)

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Network	2000 Served Households	2000 Unserved Households	Total
UPN	70,691,088	34,789,013	105,480,101

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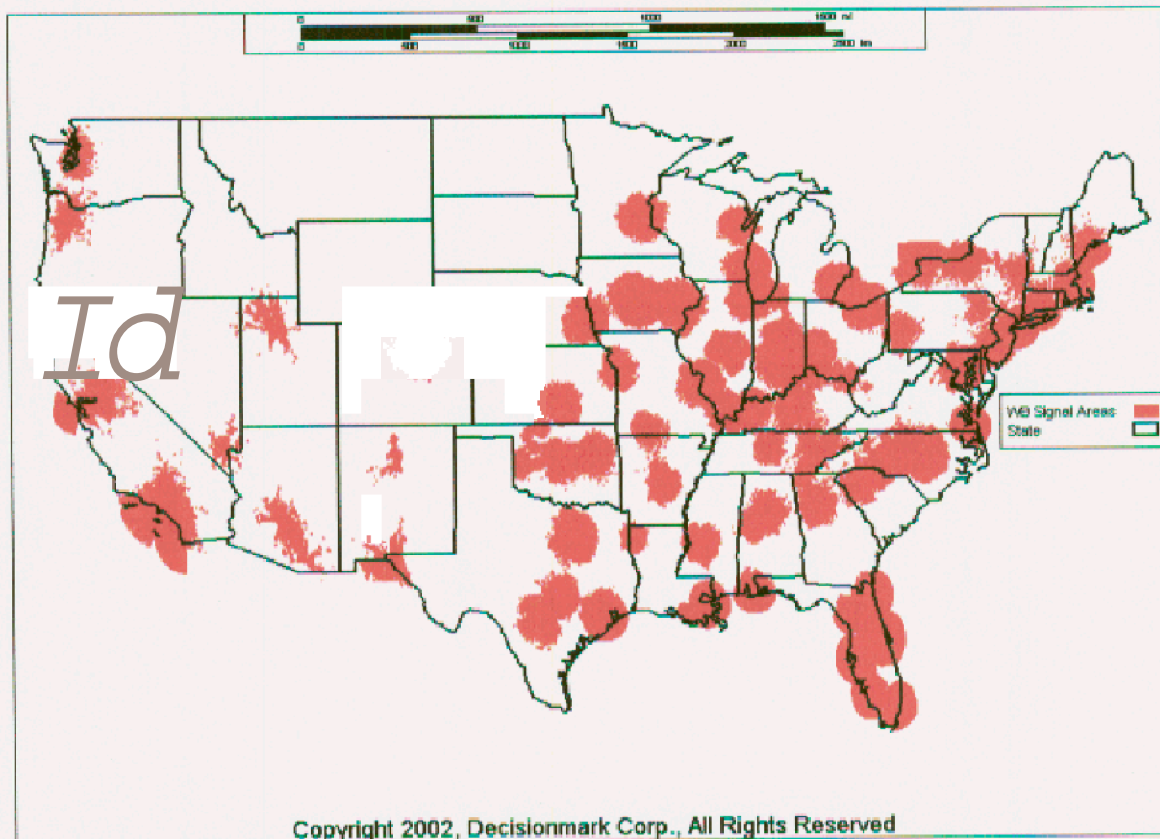
## National Coverage for UPN Translators Only



## Served/Unserved HHs for UPN (Translators Only)

Network	2000 Served Households	2000 Unserved Households	Total
UPN	1,320,128	104,159,973	105,480,101

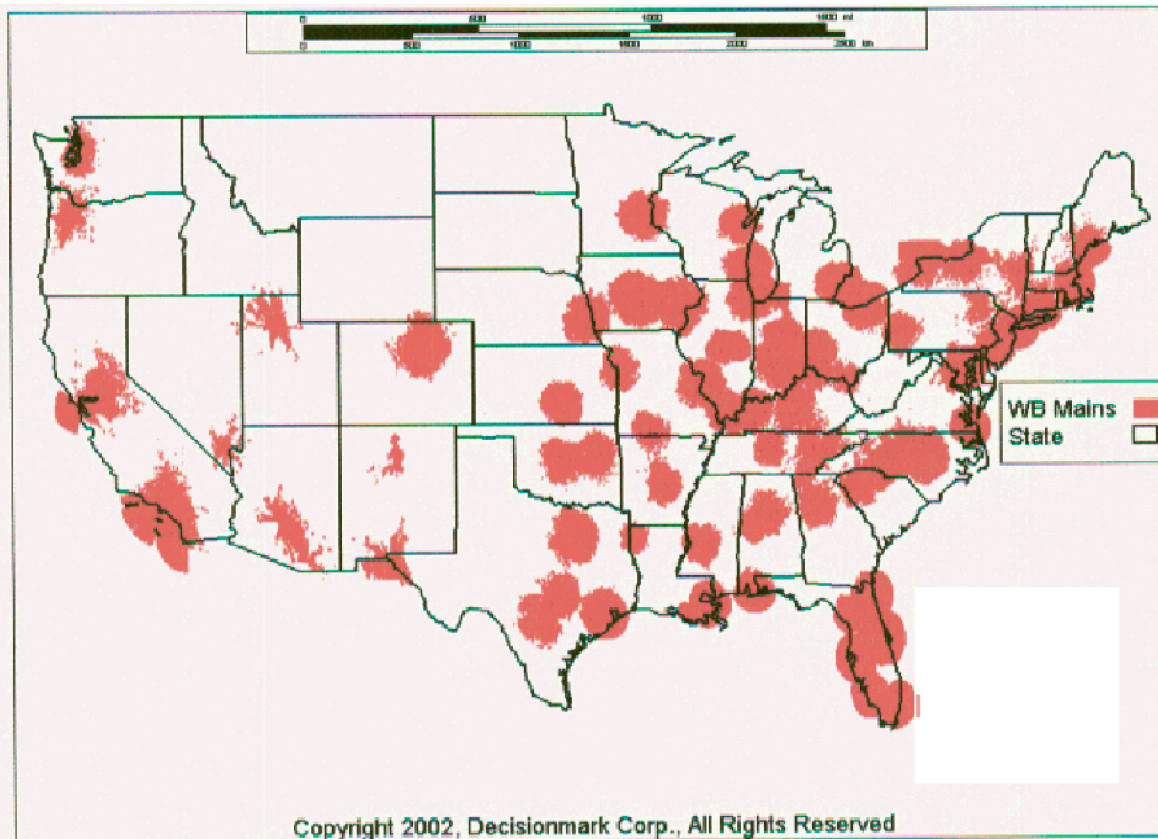
## National Coverage for WB Mains and Translators



## Served/Unserved HHs for WB

Network	2000 Served Households	2000 Unserved Households	Total
WB	70,740,882	34,739,219	105,480,101

## National Coverage for WB Mains Only



### Served/Unserved HHs for WB (Mains Only)

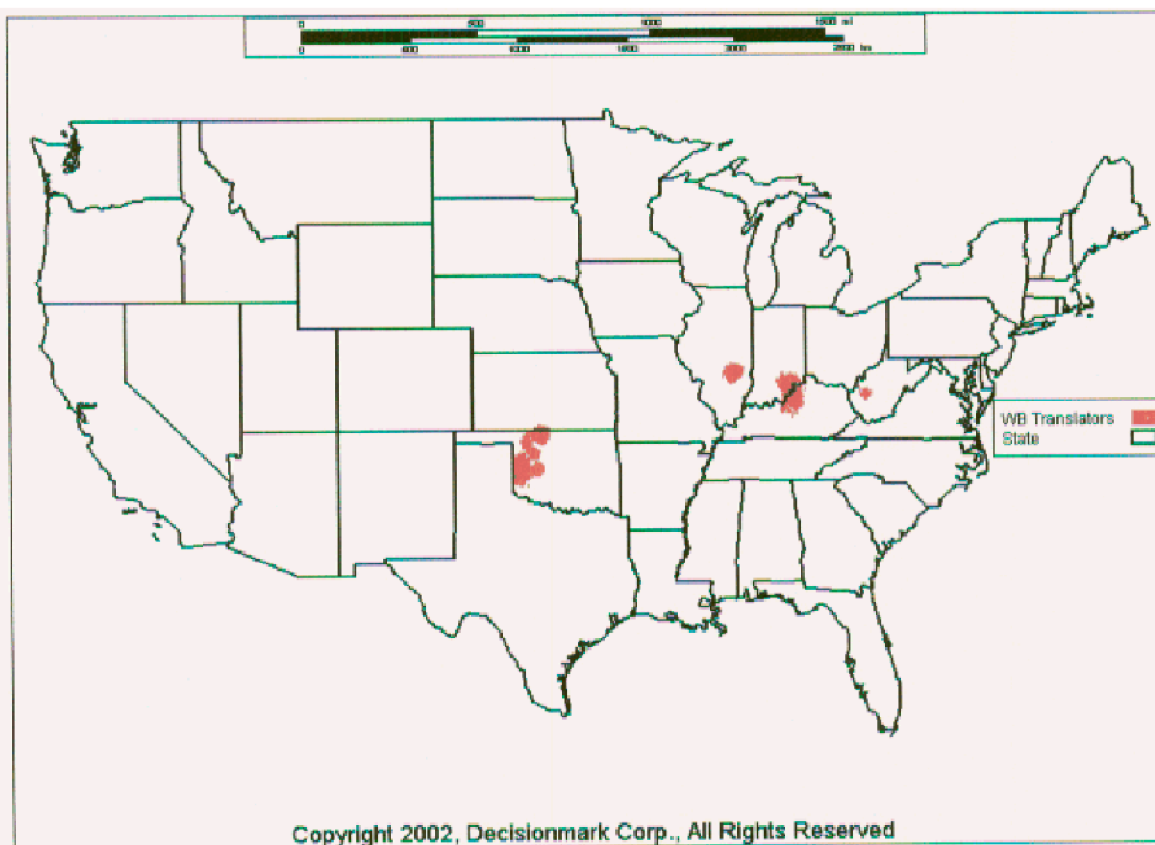
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Network	2000 Served Households	2000 Unserved Households	Total
WB	70,542,157	34,937,944	105,480,101

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## National Coverage for WB Translators Only



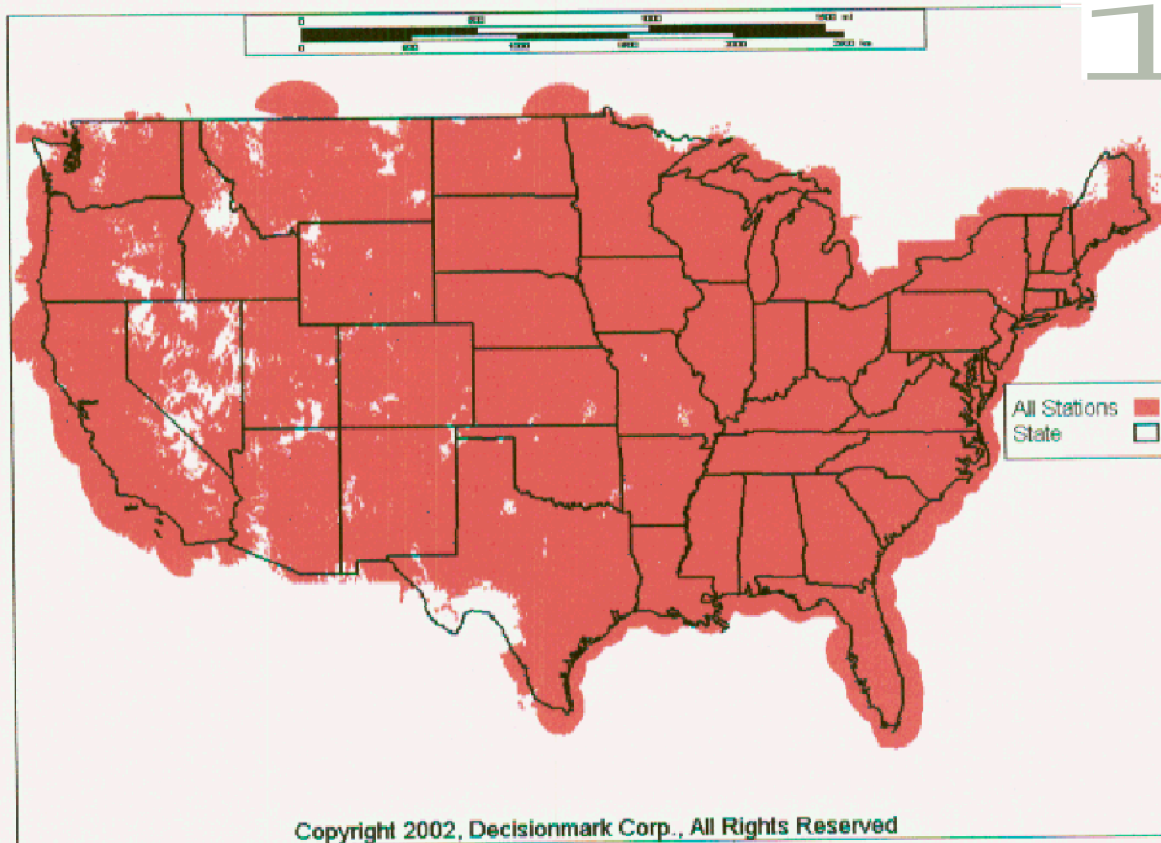
### Served/Unserved HHs for WB (Translators Only)

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Network	2000 Served Households	2000 Unserved Households	Total
WB	769,621	104,710,480	105,480,101

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## National Coverage for All 7 Networks Mains and Translators



### Households That Can/Cannot Receive all 7 Networks

Network	2000 HHs Can Receive All 7	2000 HHs Cannot Receive All 7	Total
All	58,587,112	46,892,989	105,480,101